

Appendix B. KMC, LLC Committed Environmental Protection Measures.

Resource	Control	Environmental Protection Measure
Transportation	Best Management Practices	KMC, LLC would enforce a vendor compliance program, requiring customers to provide evidence of vehicle registration and a Class A or B Commercial Driver's License (CDL).
		KMC, LLC would continue to coordinate with Yavapai County and Arizona Department of Transportation as needed to ensure appropriate and required measures are taken for traffic safety.
	Signage	KMC, LLC would install appropriate haul truck crossing signage before the mine site driveway, and the access road would be paved to assist safe highway ingress and egress.
Air Quality	Dust Abatement	Water would be routinely sprayed from a water tanker onto mine roadways, and a combination of misters, spray bars, and flanges would be used as needed in the crushing operations for dust suppression.
		Speed limits for operating equipment would be enforced to reduce fugitive dust.
		Vegetation clearing would be kept to the minimum necessary for mining to retain stabilized soils and reduce fugitive dust.
		KMC, LLC would require all trucks hauling HQP from the mine to be covered.
		Concurrent reclamation would be completed where possible to control dust.
		KMC, LLC would provide annual air monitoring and reporting in accordance with federal and state regulations and the ADEQ Air Quality General Permit to meet the following objectives of 43 CFR 3809.401(b): <ul style="list-style-type: none"> • to demonstrate compliance with an approved plan and other Federal or state environmental laws and regulations; • to provide early detection of potential problems; and • to supply information that will assist in directing corrective actions should they become necessary.
	Emissions	All mining equipment would be fitted with manufacturer standard emission controls to reduce emissions below the EPA mandated threshold levels.
Soils	Erosion Control	KMC, LLC would mine the material in 15-ft benches and keep vegetation clearing to a minimum to retain stabilized soils.
		KMC, LLC would use rock mulch, drainage swales, berms, and retention basins within the mine site to limit erosion.
		Direct runoff of water used for dust control would be limited to the extent practicable and would not cause downstream erosion or flooding.

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		KMC, LLC would implement BMPs for erosion and sediment control measures identified in the SWPPP. The effectiveness of erosion control measures would be monitored during the mining operation.
		KMC, LLC would employ interim revegetation where practicable to stabilize slopes that are expected to remain in place until final reclamation.
	Reclamation	Reclamation would be conducted consistent with the H-3809-1 Surface Management Handbook (BLM 2012) and the H-3042-1 Solid Minerals Reclamation Handbook (BLM 1992).
		<p>Reclamation and closure of the mine area would include:</p> <ul style="list-style-type: none"> • Recontouring the slope angles to a minimum of 3H:1V to ensure stable slopes that would reduce erosion; • Regrading and revegetating the reclaimed surfaces, and • Maintaining and constructing drains and retention ponds as practicable for stormwater management.
Water Quality	Spill Prevention	KMC, LLC would develop and implement an SPCC Plan to manage storage and usage of oil-based products during operations. Only minor servicing of mobile equipment (greasing and periodic fueling) would be conducted at the mine site on BLM lands, limiting the potential for used oil or diesel fuel spills. Oil changes and other maintenance would occur on adjacent private land. Spill response kits shall be maintained to ensure that pollutants are prevented from entering into washes. Any pollutants generated by mining or transportation activities shall be properly disposed in accordance with applicable regulations.
		KMC, LLC would use a double-walled storage tank with built-in secondary containment and interstitial monitoring to prevent leakage of fuel in accordance with the SPCC Plan. Protective barriers and berms would prevent accidental damage from vehicles to the above-ground fuel tank.
	Stormwater Controls	A SWPPP would be developed in accordance with the Arizona MSGP for Mineral Mining and Dressing, Sector J, and implemented to control sedimentation from disturbance associated with mine activities. BMPs would be installed to manage stockpile areas and other disturbed surfaces. Sediment control structures could include, but not be limited to fabric and/or hay bale filter fences, siltation or filter berms, and down gradient drainage channels to control storm water.
	Project Design	All mining activities would be located 50-feet or more from any potential water of the U.S.

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Public Safety		An at grade crossing of a tributary to Copper Basin Wash would be protected with concrete to allow for safe crossing during rain events and prevent erosion of the wash.
		Clean groundwater would be used for dust abatement and would not cause downstream erosion nor flooding nor cause an exceedance of applicable water quality standards.
	Fire Management	KMC, LLC would prohibit parking of vehicles on top of vegetation and permit smoking in designated areas only.
		KMC, LLC would ensure that equipment used for vegetation clearing would be equipped with spark arresters and maintained in proper working order. KMC, LLC, would properly remove cleared vegetation to reduce excess fire fuels.
		KMC, LLC would maintain proper storage and containment of fuels and other ignitable materials.
		All mobile equipment would be equipped with fire extinguishers, hand tools, and first aid kits.
		KMC, LLC would coordinate with local law enforcement and fire departments to provide 24-hr access as needed for emergency response.
		Two 18,000-gallon water storage tanks onsite for dust suppression would be available to assist in firefighting operations.
		During extended periods of time of non-operation or seasonal closure, all equipment and supplies would be removed from the BLM lands within the Project Area.
		Fire extinguishers would be installed in accordance with National Fire Protection Association 10 mandates during operation
	Security	Access to the mine would be controlled by an automatic gate that would be locked after working hours. Fencing and signage would be used to limit access to operation areas from back roads and trails in compliance with MSHA regulations.

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Vegetation	Reclamation	KMC, LLC would use BLM-approved native seed mixtures when reseeding reclaimed areas to help establish a diverse native plant community. The seed mix list would be reviewed before revegetation activities are initiated to confirm the availability of the seeds, and the list would be adjusted as needed. The seed mix and mulch materials would be certified by the revegetation contractor to be relatively weed free. Revegetation areas would be seeded after cover placement and at the appropriate time of the year for optimum seed germination and plant growth.
		Roads not needed for post-closure access would be reclaimed. The abandoned road surfaces would be scarified by ripping, if necessary. Where needed, rock or earthen berms and water bars would be placed to prevent vehicular access and reduce erosion. The road corridors would be reclaimed by treatment with a mulch/seed mix to promote revegetation.
	Noxious Weed Prevention	KMC, LLC would clear weeds and fire fuels from its private lands adjacent to BLM lands and implement weed control measures for all unpaved areas consistent with the BLM Phoenix District's Integrated Weed Management Program (IWMP).
		KMC, LLC would coordinate with the BLM to control any invasive weeds in compliance with the BLM Phoenix District's IWMP.

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Wildlife	Project Design	KMC, LLC would clear vegetation only in areas necessary for mining and ancillary facilities.
		KMC, LLC would employ interim revegetation where practicable to begin habitat restoration before final reclamation.
		KMC, LLC would use existing roads to the maximum extent possible and keep surface impacts to a minimum to reduce habitat modification.
		Speed limits for operating equipment would be enforced to reduce wildlife mortality.
		KMC, LLC would limit mine operations to occur between dusk and dawn and avoid illumination of adjacent habitat to reduce effects to light-sensitive species.
		To the extent possible, KMC, LLC would avoid clearing vegetation during the migratory bird-nesting season from March 1 st – August 1 st . If clearing activities are required for operation during the bird-nesting season, KMC, LLC would perform a clearance survey to check the area for active nests. Any active nests encountered would be avoided until the birds have fledged.
	Noise Abatement	Levels of noise would be reduced or eliminated during periods when the greatest nuisance is perceived, typically during nighttime hours.
		High-profile rock outcrops, which serve as a natural noise attenuator, would be left in place along the western and southwestern sides of the proposed mine area to reduce the effects to adjacent habitat and wildlife corridors.
		Mine vehicles and equipment would be maintained in proper operating condition and would be equipped with manufacturers' standard noise control devices or better (e.g., mufflers, engine enclosures, etc.).
Cultural	Project Design	KMC, LLC has worked with BLM to develop physical protection measures that would ensure integrity of the historic properties. The Proposed Action has been modified to provide a 50- to 100-ft avoidance buffer from cultural resources sites that have been determined to be eligible for listing under the NRHP.
		KMC, LLC would protect any previously unknown cultural or paleontological sites encountered during mining by immediately suspending operations temporarily at that site, notifying BLM, and coordinating with BLM before resumption of operations.

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		KMC, LLC would place an earthen berm around the edge of the area of potential effect (APE) in the vicinity of the rock shelters; with a buffer of 50 to 100 feet from the edge of eligible cultural resource site boundaries. In addition to providing a physical barrier to separate the proposed mining activity from the historic properties, the earthen berm would be contoured on the exterior side (facing the sites) to preserve the setting and re-seeded with native vegetation to ensure that erosion is kept to a minimum. The height of the earthen berm and re-seeding would be based on Mine Safety and Health Administration standards and would not intrude on the surrounding skyline, which includes a view of Kirkland Peak as well as a number of promontories within higher elevations of the Bradshaw Mountains. An additional fence would be constructed below the rock shelter sites along Copper Basin Wash to ensure an additional level of site protection and public safety.
Visual	Reclamation	Reclamation would be implemented to disguise mining disturbance and restore the land to a condition suitable for post-mine multiple use and sustained yield.
	Project Design	Mining operations are planned in a location so it would not be visible from most of Iron Springs Road and, as the mine is deepened, would be progressively less visible from distant, higher elevation vantage points.